IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

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| JULIA ROBERTSON-ARMSTRONG | : | CIVIL ACTION |
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| v. | : | |
| | : | |
| ROBINSON HELICOPTER COMPANY, INC., et al. | : | NO. 13-2810 |

MEMORANDUM

Bartle, J. November 19, 2015

Plaintiff Julia Robertson-Armstrong ("Robertson-Armstrong") was severely injured on July 20, 2011 when a helicopter in which she was a passenger crashed in New Jersey. She has sued Robinson Helicopter Company, Inc. ("Robinson"), the manufacturer of the helicopter, as well as Nassau Helicopters, Inc. ("Nassau"), which owned and operated it at the time of the crash.[1] Her complaint includes claims for strict liability, negligence, negligent misrepresentation and omission, and fraud against Robinson and a negligence claim

1. Roberston-Armstrong also sued three related business entities: Textron, Inc. ("Textron"); AVCO Corporation ("AVCO"); and Lycoming, a/k/a Lycoming Engines, a/k/a Lycoming Engines Operating Division of AVCO Corporation, a/k/a Textron Lycoming Reciprocating Engine Division ("Lycoming"). She alleged that Lycoming had manufactured the engine of the subject helicopter and its "fuel related components," that Lycoming was a division of AVCO, and that Textron was liable for AVCO's acts under a participation theory. On April 23, 2014 the court dismissed Robertson-Armstrong's claims against Lycoming and Textron. The parties subsequently stipulated to the dismissal of Robertson-Armstrong's claims against AVCO and Nassau's crossclaims against AVCO and Textron.

against Nassau. Robinson and Nassau subsequently filed crossclaims against one another, each asserting that the other is liable for the harm alleged.

Robinson has filed a number of pretrial motions challenging Robertson-Armstrong's experts under Daubert v. Merrel Dow Pharmaceuticals, 509 U.S. 579 (1993), and Rule 702 of the Federal Rules of Evidence. We will now consider the motion of Robinson to preclude Robertson-Armstrong's expert Harold L. Miller II ("Miller") from offering certain opinions at trial.

I.

The court has a "gatekeeping" function in connection with expert testimony. See Gen. Elec. Co., et al. v. Joiner, 522 U.S. 136, 142 (1997); see also Daubert, 509 U.S. at 589. Rule 702 of the Federal Rules of Evidence provides:

> A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. As our Court of Appeals has repeatedly noted, Rule 702 embodies three requirements: qualification,

reliability, and fit. Pineda v. Ford Motor Co., 520 F.3d 237, 244 (3d Cir. 2008).

An expert is qualified if he "possess[es] specialized expertise." Schneider ex rel. Estate of Schneider v. Fried, 320 F.3d 396, 404 (3d Cir. 2003). This does not necessarily require formal credentials, as "a broad range of knowledge, skills, and training qualify an expert," and may include informal qualifications such as real-world experience. In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 741 (3d Cir. 1994). The qualification standard is a liberal one, and an expert may be sufficiently qualified under Rule 702 even if "the trial court does not deem the proposed expert to be the best qualified or because the proposed expert does not have the specialization that the court considers most appropriate." Holbrook v. Lykes Bros. S.S. Co., 80 F.3d 777, 782 (3d Cir. 1996).

To determine reliability, we focus not on the expert's conclusion but on whether that conclusion is "based on the methods and procedures of science rather than on subjective belief or unsupported speculation." Schneider, 320 F.3d at 404 (internal quotation marks omitted). Our analysis may include such factors as:

> (1) whether a method consists of a testable hypothesis; (2) whether the method has been subject to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the

> technique's operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put.

Pineda, 520 F.3d at 247-48.

"[T]he test of reliability is flexible" and this court possesses a broad latitude in determining reliability. Kumho Tire Co. v. Carmichael, 526 U.S. 137, 141-42 (1999). To be reliable under Daubert, a party need not prove that his or her expert's opinion is "correct." Paoli, 35 F.3d at 744. Instead:

> As long as an expert's scientific testimony rests upon good grounds, based on what is known, it should be tested by the adversary process –competing expert testimony and active cross–examination – rather than excluded from jurors' scrutiny for fear that they will not grasp its complexities or satisfactorily weigh its inadequacies.

United States v. Mitchell, 365 F.3d 215, 244 (3d Cir. 2004) (quoting Ruiz–Troche v. Pepsi Cola Bottling Co., 161 F.3d 77, 85 (1st Cir. 1998)).

As for "fit," expert testimony must also "assist the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702. Thus, to "fit," such evidence must bear some relation to the "particular disputed factual issues in the case." United States v. Downing, 753 F.2d 1224, 1237 (3d Cir. 1985). Accordingly, this factor has been

described as one of relevance. Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 591 (1993); Paoli, 35 F.3d at 745 & n.13.

II.

Miller was retained by Robertson-Armstrong to provide expert opinions on "safety issues, emergency procedures, and industry safety standards" related to the Robinson R22 helicopter and to opine on the cause of the subject crash.

Miller's Curriculum Vitae and an affidavit signed by him and submitted by Robertson-Armstrong shed light on his background in aviation safety. A certified helicopter pilot and flight instructor, Miller has accumulated more than 1200 flight hours in the Robinson R22 model helicopter, 800 of which were spent instructing flight students. He has completed numerous courses in helicopter piloting. In his affidavit, he emphasizes that an understanding of helicopter design is essential to piloting and pilot training. Accordingly, he is trained in certain aspects of helicopter design, and is familiar with the design elements of rotocraft generally and the Robinson R22 helicopter in particular. As a commercial helicopter pilot, Miller is also required to remain familiar with federal aviation regulations. Finally, Miller has participated in aviation accident investigations and has assisted in the assessment of crash causation on multiple occasions.

In this matter, Miller prepared an expert report dated July 6, 2015 as well as a supplemental report dated September 30,

2015. His July 6 report details his analysis relating to the subject crash and sets forth conclusions about whether that subject crash was caused by mechanical failure, whether the Robinson R22 helicopter complies with federal regulations, whether the design of the R22 helicopter is "unreasonably dangerous," whether the design of the R22 helicopter permits it to be operated safely by an experienced pilot as set forth in the federal aviation regulations, whether Robinson is aware of the R22 helicopter's allegedly dangerous character and whether it responsibly marketed the aircraft in light of that knowledge, and whether the helicopter's design features caused the crash and Robertson-Armstrong's injuries. Miller states that he formed his conclusions by consulting deposition transcripts, pleadings, discovery documents provided by the parties, photographs and blueprints related to the subject helicopter and the crash, and regulatory and instructional materials, among other items.

III.

Robinson concedes that Miller is qualified "to testify regarding the operation of helicopters and the standard of care for helicopter pilots." It maintains, however, that he lacks the qualifications to provide his opinions regarding helicopter engineering and design, helicopter engine selection and design, and regulatory compliance. Robinson further contends that Miller's opinions on those three topics are inherently unreliable in that

they are "based on pure conjecture and baseless assumptions that lack any factual support in the record."[2]

We first address whether Miller is qualified to offer the opinions at issue. As noted above, Miller has extensive expertise in piloting, which Robinson does not dispute. What Robinson's argument overlooks, however, is that the nature of Miller's piloting background also qualifies him to offer testimony on helicopter engineering and design, helicopter engine selection and design, and regulatory compliance. In order to obtain his piloting credentials, Miller developed extensive familiarity with helicopter design, and he must maintain this familiarity in order to fulfill his obligations as a commercial pilot and instructor. This expertise is reinforced by Miller's role as a helicopter piloting instructor. As to his qualifications with respect to the federal aviation regulations, Miller's work as a commercial pilot requires him to be familiar with and understand those regulations. As a result, he holds "specialized expertise" in that area. See Schneider, 320 F.3d at 404. In sum, Miller is qualified to offer opinions on helicopter engineering and design, helicopter engine selection and design, and regulatory compliance.

We note, however, that Miller opines in his report that "Robinson . . . is aware of the deficient and dangerous operating

2. Robinson does not appear to challenge the "fit" of Miller's testimony to the facts of this particular case. See Pineda, 520 F.3d at 244.

characteristics and yet markets the R22 helicopter to inexperienced pilots and instructors." He goes on to discuss the company's familiarity with the experience levels of the pilots to whom it market its products and speculates as to how these pilots might have reacted had they known of the R22 helicopter's purportedly dangerous character. Our thorough review of Miller's Curriculum Vitae and affidavit does not convince us that he has any qualifications to opine on Robinson's knowledge or management practices or on the speculative behavior of its customers. We will therefore preclude him from offering these opinions at trial.

We turn now to the merits of Robinson's position that Miller's remaining opinions about the design of helicopters and helicopter engines and about federal aviation regulations have "no reliable basis." Contrary to Robinson's assertions, these opinions appear to be the product of generally-accepted investigative methods. See Pineda, 520 F.3d at 247-48. Specifically, in determining that the subject helicopter is "unreasonably dangerous," Miller identified specific factors which make this characterization accurate. He provides support for those factors in his report. Although Robinson takes issue with Miller's statement that the R22 helicopter "is unable to perform in its normal operating envelope," Miller explains clearly that he based this determination on the aircraft's design, "its 'de-rated' engine, and its low inertia rotor system."

Robinson also argues that Miller impermissibly draws legal conclusions by opining that the Robinson R22 helicopter requires "exceptional piloting skills and alertness" in violation of federal aviation regulations. We disagree with Robinson's assertion that this testimony must be barred. Miller's familiarity with the applicable regulations and his detailed explanation of his conclusion demonstrate that it is reliably based in fact. Finally, we disagree with Robinson that Miller should be precluded from offering certain opinions which the company characterizes as "foundationally incorrect." Whether those opinions are incorrect is an issue for the trier of fact. See Mitchell, 365 F.3d at 244.

Further, Robinson is wrong that Miller's opinions are the result of "pure conjecture." In fact, as noted above, Miller formulated his conclusions by consulting a wide variety of materials related to the subject helicopter and the crash, including materials related to the design of the Robinson R22 helicopter and other models. In analyzing the materials used in his investigation, Miller drew upon the same considerable experience that qualifies him to testify in this matter. Miller's opinions clearly "rest[] upon good grounds" and should therefore "be tested by the adversary process . . . rather than excluded from juror's scrutiny." See Mitchell, 365 F.3d at 244.

In sum, Miller is qualified to provide his opinions on regarding helicopter engineering and design, helicopter engine selection and design, and federal aviation regulations, and the methodology he used in forming those opinions was reliable. However, he is not qualified to opine on Robinson's knowledge or management practices or on the specific behavior of its customers. Robinson's motion will be granted insofar as it concerns this latter category of opinions. It will otherwise be denied.